

REFERENCES

- Champion, G. C.** 1913. III. Notes on various Central American Coleoptera, with descriptions of new genera and species. *Trans. Ent. Soc. Lond.* Part I, p. 58-169.
- Fall, H. C.** 1905. Revision of the Ptinidae of Boreal America. *Trans. Amer. Ent. Soc.* 31:97-296.
- Gorham, H. S.** 1886. *Biologia Centrali-Americana*, Insecta, Coleoptera, Supplement to Malacodermata, vol. 3, pt. 2, p. 313-360.
- Lecote, J. L.** 1878. Additional descriptions of new species. In Schwarz, *The Coleoptera of Florida*. *Proc. Amer. Phil. Soc.* 17:373-434.
- Lepesme, P.** 1947. Bostrychoidea. In Fleutiaux, et al., *Coleopteres de Antilles*, Faune de L'Empire France, VII (vol. 1):194-233.
- Lucas, R.** 1920. *Catalogus alphabeticus generum et subgenerum Coleopterorum* . . . Berlin. 696 p.
- Pic, M.** 1909. Supplement a la liste des Coleopteres de la Guadeloupe. *Ann. Soc. Ent. France* 78:166-172.
- . 1937. Nouveaux Coléoptères du Musee Zoologique de Hamburg. *Ent. Nachrichtenblatt* 10(4):193-196.

TWO NEW ORIENTAL SPECIES OF THE GENUS MYOLEPTA NEWMAN
(DIPTERA: SYRPHIDAE)¹

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ABSTRACT—Two new species of Oriental *Myolepta* Newman (Diptera: Syrphidae) *M. petiolata* and *M. orientalis*, are described from Thailand. A key to the Oriental species of *Myolepta* is included.

Two new Oriental species of the genus *Myolepta* Newman are described from Thailand. These two species are unique among the known species of *Myolepta* due to their long antennae. *Myolepta* characteristically has short antennae, about one half as long as the face, and roughly oval third antennal segments, whereas the sister-group to *Myolepta*, *Lepidomyia* Loew, has elongate antennae, as long as or longer than the face, and elongate third antennal segments, two or more times as long as broad. The only other difference between *Myolepta* and *Lepidomyia* is the presence in *Lepidomyia* of a facial tubercle in the female (Thompson, 1968). Also *Lepidomyia* is endemic to the New World tropics but *Myolepta* is distributed throughout the Holarctic region and most of the Neotropical region. Until now only one

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species of *Myolepta* has been known from the confines of the Oriental region. The two new species, although they have long antennae like *Lepidomyia*, are placed in *Myolepta* because 1) they lack the facial tubercle in the female, and 2) of their Oriental distribution. The three known oriental species of *Myolepta* can be distinguished by the following key.

KEY TO THE ORIENTAL SPECIES OF *Myolepta* NEWMAN

1. Antennae short, less than one-half as long as face; third antennal segment oval; scutellum black **himalayana** Brunetti (India)
- Antennae long, about as long as or longer than face; third antennal segment elongate; scutellum not all black, with some light color 2
2. Abdomen petiolate; scutellum orange **petiolata**, n. sp. (Thailand)
- Abdomen oval, not petiolate; scutellum black, with a yellow tip
..... **orientalis**, n. sp. (Thailand)

***Myolepta himalayana* Brunetti**

Myolepta himalayana Brunetti, 1915, Rec. Indian Mus. 11:233, pl. xii, fig. 12, male head, profile, fig. 13, wing; 1923, Fauna British India, Diptera III:229, fig. 46, male head, profile.

Myolepta himalayana is readily distinguished from both new species by the above key and also the following characteristics: 1) completely reddish-orange second abdominal segment; 2) orange abdominal tip; and 3) yellowish-orange trochanters and bases and tips of the tibiae, with the rest of the legs black.

***Myolepta petiolata* Thompson, n. sp.**

(Figs. 2, 3)

Metallic bluish-black fly except for orange scutellum and with a petiolate abdomen.

Female.—Head: face metallic bluish-black, with short scattered white pile, medially shiny and laterally golden pollinose; facial grooves long, extending two-thirds of the distance to antennal pits; cheeks metallic bluish-black, golden pollinose on posterior half; front metallic bluish-black, with short white pile, golden pollinose on upper two-thirds and shiny on lower third; frontal lunule orange; vertex not protuberant, metallic bluish-black, with short white pile and shiny; occiput metallic bluish-black, with white pile and golden pollinose. Antennae slightly shorter than face, orange except dark apical tip and dorsal half of third segment; first segment with three short black dorso-apical bristles; second segment with a short black dorso-apical bristle; third segment elongate, tapering on apical half to a broad blunt tip, about two and one half times as long as first and second segments together; arista dark orangish-brown, slightly longer than antenna and also face.

Thorax: slightly longer than broad, bluish-black, grayish pollinose except golden pollinose on transverse sutures and shiny on anterior part of sternopleurae and all pteropleurae; pleurae with short white pile; dorsum with short white pile except

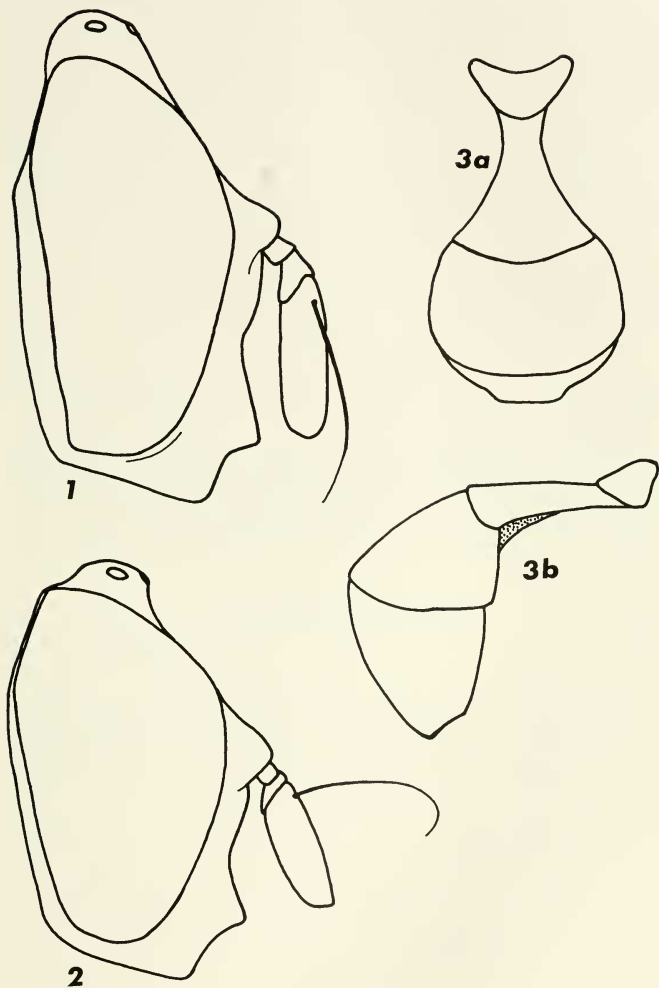


Fig. 1, *Myolepta orientalis*, n. sp., head of female in lateral view. Figs. 2, 3, *M. petiolata*, n. sp.: 2, head of female in lateral view; 3, abdomen, a. dorsal view; b. lateral view.

black pile in front of transverse sutures and in a complete transverse band behind the sutures; metasternum bare; metathoracic spiracular pile patch present; meta-epimera extending behind coxae and separated by only a narrow membranous band. Scutellum orange, with white pile, without ventral pile fringe or apical emarginate rim. Plumulae and squamae orange. Halteres orange. Legs: with pale pile; coxae dark brown and gray pollinose; trochanter dark brown; femora reddish-brown except yellow basal fifth; tibiae reddish-brown; tarsi dark brown except yellow first segments and basal half of second segments. Wings: hyaline except for a slightly brownish tinge behind stigma, with stigma brownish, with orange humeral bristles; basal part of wing bare—costal cell, both basal cells, anal cell except for a small apical patch with microtrichi, base of discal cell, posterior part of wing behind anal cell and base of cubital cell; apical part of wing microtrichose.

Abdomen: as long as thorax, petiolate, constricted at base of second segment, metallic bluish-black, with appressed golden pile; venter silvery pollinose and with short scattered white pile. Abdomen of type is badly greased, thus it is impossible to determine whether there were pollinose marking on the dorsum.

Holotype female.—THAILAND, NW Chiangmai Prov., Chiangdao; 450 m., 5–11 April 1958 (T. A. Maa, no. 320). The type is deposited in the Bishop Museum, Hawaii.

Discussion: *Myolepta petiolata* can be distinguished from all other known species of *Myolepta* by its petiolate abdomen and almost complete postmetacoxal bridge (the extension of meta-epimeron behind the coxae). For discussion of other differences between *petiolata* and *orientalis* or *himalayana*, see the key or the discussion under those respective species.

***Myolepta orientalis* Thompson, n. sp.**

(Fig. 1)

Metallic bluish-black fly with tip of abdomen golden tomentose and tip of scutellum yellow.

Female.—Head: face metallic bluish-black, with fine short scattered white pile, light golden pollinose except for shiny semicircular spot under antennae which is connected narrowly and laterally with shiny area of front; facial grooves long, extending about two-thirds of the distance to antennal pits; cheeks bluish-black with a slight reddish tinge under certain light conditions, with fine short scattered white pile and shiny; front metallic bluish-black, with fine short scattered white pile, light golden pollinose on upper two-thirds, with pollen denser on medial third, shiny on lower one-third except pollinose narrowly on sides, with two medial longitudinal grooves on upper two-thirds which delimit the medial third from sides; frontal lunule orange as are antennal sockets; vertex metallic bluish-black with a slight reddish tinge under some light conditions, with a few scattered white hairs, shiny, slightly protuberant; occiput golden pollinose and white pilose. Antennae orange except light brownish on upper two-thirds of third segment, as long as face; second segment with a short black dorso-apical bristle; third segment twice as long as first and second segments together, with parallel ventral and dorsal margins, with blunt tip; arista orange, as long as antenna.

Thorax: slightly broader than long, metallic bluish-black except reddish tinged at sutures and orangish-brown postalar calli; pro- and metathorax grayish pollinose; mesothoracic pleurae bare except for scattered white scales and shiny; metasternum bare; metathoracic spiracular pile patch present; dorsum with disc dull-grayish pollinose except for two indistinct broad brownish longitudinal pollinose stripes and white pollinose at ends of transverse sutures, with lateral margins shiny, with appressed black pile and with scattered narrow white scales. Scutellum with apical emarginate rim, without ventral pile fringe, black except yellow apical fifth, with black pile and few white hairs intermixed. Plumulae short and brown. Squamae dirty white with brown margin and fringe. Halteres orange. Legs: with light pile except dark pile on apical half and dorsal edge of femora; coxae and trochanters orange; femora and tibiae metallic bluish-black; tarsi orange except dark brown apical four segments of protarsi. Wings: hyaline except veins orange on apical third and dark brown on basal two-thirds, with luteous stigma, with a few black humeral bristles, microtrichose except for following bare areas—basal two-thirds of costal cell, both sides of spurious vein in first basal cell, posterior half of second basal cell, anterior half of anal cell and anterior half of alula.

Abdomen: as broad as thorax, short oval, curved ventrally after second segment, with an indistinct medial semicircular depression on apical half of fourth segment, with fifth segment retracted under fourth segment, metallic bluish-black except orange apical third of fourth segment, shiny except grayish pollinose on first segment; venter with light pile; first tergite with white pile; second tergite with appressed golden pile on lateral third and appressed black pile medially; third tergite with appressed golden pile laterally, medially with longitudinal band of tomentum which occupies one-eighth of basal margin of segment expanding posteriorly to occupy one-half of apical margin, elsewhere with appressed black; fourth tergite completely covered with golden tomentum.

Holotype female.—THAILAND, NW Chiangmai Prov., Chiangdao; 450 m., 5–11 April 1958 (T. A. Maa, no. 336). The type is deposited in the Bishop Museum, Hawaii.

Discussion: *Myolepta orientalis* can be easily separated from *M. petiolata* by the characters given in the key and by its: 1) golden tomentose abdominal tip; 2) brown plumulae; 3) dirty white squamae; 4) orange coxae and trochanters; and 5) metallic bluish-black femora and tibiae.

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REFERENCES

- Brunetti, Enrico.** 1915. Notes on Oriental Syrphidae with descriptions of new species. *Rec. Indian Mus.* 11:201–256.
- . 1923. Pipunculidae, Syrphidae, Conopidae, Oestridae. *Diptera*, [vol. III], 424 pp., 85 figs., 7 pls. *In* [Shiple, A. E., ed.], *Fauna of British India* [q.v.]. London.
- Thompson, F. Christian.** 1968. The placement of the subgenus *Protolepidostola* Hull (Diptera: Syrphidae) with the description of two new species. *Jour. Kansas Ent. Soc.* 41:270–277.